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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/622,877

07/18/2003

Hye Kyeong Park

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04/19/2007

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EXAMINER

SMITH, MARCUS

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/622,877

Applicant(s)

PARK ET AL.

Examiner

Marcus R. Smith

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 10-19 is/are rejected.
- 7) ☒ Claim(s) 2-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/18/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-19 are objected to because of the following informalities: All independent claims 1, 10, and 19 use (i.e., a root of a nearby node's tree). The parenthesis statement in the claims should be deleted since it is not given any patentable weight and the examiner cannot tell if that phrase is part of the claimed invention. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10-18 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 10 and its dependents teach a method that has an intermediate node being set as a root for one tree with paths leading to start node and to the destination node. The specification only describes two trees with two different root nodes, so the applicant fails to teach how claims 10-18 are enabled.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Parham et al. (US 6,879,564).

with regard to claims 1 and 19, Parham et al. teaches:

A method/computer readable medium (column 3, lines 40-50) for performing a process associated with a QoS-guaranteeing multi-path in a path-based communication network having a plurality of nodes, comprising the steps of:

a) determining a start node (server C), a destination node (server E) and a requirement condition associated with a reference cost consumed in a range from the start node to the destination node (column 5, lines 5-10: The examiners views any sales servers (A-E) as a source or destination nodes. And the requirement condition is to cheapest path (see column 4, lines 35-40).);

b) creating a first tree adapting the start node (server C) as its root and a second tree (server E) adapting the destination node as its root (column 4, lines 10-13: Servers A-E are designated as roots of trees. Figure 4a), including nodes close to the start node

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in a first node group, and including nodes close to the destination node in a second node group (column 5, lines 14-19: Servers I and J are group to the root servers. See figure 4b and 4c);

c) selecting a node having a minimum cost associated with the roots from among a plurality of nodes contained in the first and second node groups, and including the selected node having the minimum cost in a tree of a corresponding root (column 5, lines 13-19: Servers I and J were selected because they were closest (minimum cost) to the root node.);

d) if the selected node included in the tree at the step (c) is also included in the first and second trees, and a cost consumed in the range from the start node to the destination node on the basis of the selected node is less than the reference cost, providing a corresponding path associated with the cost (figure 5: column 5, lines 40-49: The system connects the two trees and calculated cost of connecting them together for each link (selected node). The cost of the path must be minimized, so the system follows this method of determining the minimum –cost spanning tree. The first step is to find the cheapest link (column 6, lines 5-9).);

e) including a nearby node (node H) of the selected node in a node group having the selected node when the selected node included in the tree at the step (c) is also included in either one of the first and second trees (server E's tree) (column 5, lines 25-34), comparing two paths ranging from a root to the nearby node when the nearby node is previously included in the node group, and deleting a link of a cheaper one of the two paths (figure 6, before picture shows multiple paths to C to E through c-d-e, c-i-j-e, or c-

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d-f-h-j-e) in figure 6, the system picks the cheapest path which is c-i-j-e (step 1) and ignores all other paths to get to server C to server E.); and

f) determining whether there is a node contained in the first node group and the second node group, repeatedly performing a process from the step (c) when the node is found in the first and second node groups (see step 4), or terminating the process from the step (c) when no node is found in the first and second node groups (see step 3) (column 6, lines 1-26).

Allowable Subject Matter

6. Claims 2-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

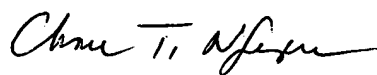
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus R. Smith whose telephone number is 571 270 1096. The examiner can normally be reached on Mon-Fri. 7:30 am - 5:00 pm every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 4/07/07



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